

## AMENDMENTS TO THE SPECIFICATION

Kindly amend the above-identified application as follows:

**Kindly replace the paragraph at page 4, line 26, of WO 2005/072515 with the following:**

According to one currently preferred embodiment, the present invention provides tomato hybrid seeds designated HA3518. Hybrid HA3518, representative seeds of which have been deposited with the American Type Culture Collection (ATCC) Association, on Jan. 29, 2004 (~~Accession No. not available~~) under Accession No. PTA-5796, serves as an example for the varieties of the present invention, wherein the plants grown from the seeds are homozygous for the *dg* mutation, produce fruit crop yield comprising an average lycopene content at least two fold its content in currently available crop yields, and devoid of the *dg* linked deleterious effects.

**Kindly replace the paragraph at page 7, line 15, of WO 2005/072515 with the following:**

According to one embodiment, the hybrid tomato variety used as a first plant in the method described above is selected from the group consisting of hybrid HA3512, HA3513, HA3518 and HA3519; these hybrids generally are equivalent to hybrid HA3518, representative seeds of which have been deposited with the ATCC on Jan. 29, 2004 (~~Accession number not available~~) under Accession number PTA-5796.

**Kindly replace the paragraph at page 12, line 23, of WO 2005/072515 with the following:**

According to one currently preferred embodiment, the present invention provides tomato hybrid seeds designated HA3518. Hybrid HA3518, representative seeds of which have been deposited with the ATCC on Jan. 29, 2004 (~~Accession number not available~~) under Accession number PTA-5796 serves as an example for the hybrids of the present invention, wherein the plants grown from the seeds are homozygous for the *dg* mutation, produce fruit crop yield

comprising an average lycopene content of at least two fold its content in currently available crop yields, and is devoid of the *dg* associated undesired pleiotropic traits.

**Kindly replace the paragraph at page 16, line 29 of WO 2005/072515 with the following:**

The HA3518 hybrid was planted during the year 2003 in [[13]] 12 different locations as described in table 1 below covering about 430 1000 m<sup>2</sup>. Ripe fruits were harvested, yield was weighed and average lycopene content was measured, as described in table 1. This large-scale trial represents various growth conditions, including local weather hazards and sub-optimal growth regime. Nevertheless, the average yield obtained from entire plot examined was commercially acceptable, and the average lycopene content of 235 ppm is significantly high. Fig. 1 shows comparison of fruit yield of various commercial varieties and hybrid HA3518 obtained at one location (Akko, North Israel). The average crop yield of hybrid HA3518 was 10.8 Kg/m<sup>2</sup>, which is considered as average to high yield for a commercial variety.

**Kindly add Table 1 below after line 5 on page 17 of WO 2005/072515 as follows:**

Table 1: Lycopene content of HA3518 hybrid in different locations

Location	Yield kg/m <sup>2</sup>	BRIX	Lycopene concentration ppm
Hefziba	8.3	5.5	236
Beit Hashita	8.0	5.0	242
Givat Oz	9.5	5.2	249
Izrael	9.7	5.0	154
Gvat	7.9	5.0	237
Yifat	6.9	5.4	223
Mizra	6.9	5.6	244
Ramat David	10.3	5.3	282
Reem	8.0	5.3	271
Alonim	7.4	5.3	252

AMENDMENT AND RESPONSE TO OFFICE ACTION  
Title: "High Lycopene Tomato Varieties and Use Thereof"  
U.S. Application No. 10/587,789

Docket No. 27275.005

Eshel	6.3	5.2	260
Mevo- Hamma	9.9	5.1	170
<b>Average</b>	<b>8.2</b>	<b>5.2</b>	<b>235</b>